

CLAIMS

We Claim:

- Sub B1
- 1 1. A method of transferring data across a computer
2 network, said computer network including a plurality
3 of computers, a database stored on one of said
4 plurality of computers, said method comprising the
5 steps of:
6 setting data transfer constraints;
7 requesting transfer of data stored on a remote
8 computer system;
9 identifying at least one object included in
10 said requested data as being associated with a
11 generic object; and
12 substituting the generic object for each of
13 said at least one object responsive to said data
14 transfer constraints.
 - 1 2. A method as in claim 1 wherein said stored data
2 includes image and sound data.
 - 1 3. A method as in claim 2, wherein image data is
2 requested by a user for display on a web browser,
3 said generic object being substituted in a web
4 browser image, said method further comprising:
5 displaying said web browser image.
 - 1 4. A method as in claim 3, wherein the remote
2 computer system identifies generic objects.
 - 1 5. A method as in claim 4, wherein while the web
2 browser image is being displayed, the remote

3 computer system is transferring generic object codes
4 associated with related images.

1 ~~6. A method as in claim 5 wherein when related~~
2 ~~images are displayed, said generic objects~~
3 ~~associated with said transferred generic object~~
4 ~~codes are substituted in said displayed related~~
5 ~~images.~~

1 ~~7. A method as in claim 6 wherein a requested~~
2 ~~object is transferred while a corresponding generic~~
3 ~~object is being displayed and further comprising:~~
4 ~~replacing and displaying each corresponding~~
5 ~~generic object with each said requested object when~~
6 ~~said requested object is received.~~

1 ~~8. A method as in claim 7, wherein the data~~
2 ~~transfer constraints include a peak net traffic~~
3 ~~constraint, a client quick mode constraint, a server~~
4 ~~quick mode constraint and an importance level.~~

1 ~~9. A method as in claim 8, wherein when said~~
2 ~~importance level is high, data is transferred from~~
3 ~~said database and the web browser image is displayed~~
4 ~~normally.~~

1 ~~10. A method as in claim 8, wherein when peak net~~
2 ~~traffic is below said peak net traffic constraint,~~
3 ~~data is transferred from said database and the web~~
4 ~~browser image is displayed normally.~~

1 11. A method as in claim 8, wherein when said
2 client quick mode constraint is not selected, data
3 is transferred from said database and the web
4 browser image is displayed normally.

1 12. A method as in claim 8, wherein when said
2 server quick mode constraint is not selected, data
3 is transferred from said database and the web
4 browser image is displayed normally.

1 13. A method as in claim 5, wherein while the web
2 browser image is being displayed, the remote
3 computer system is further transferring additional
4 generic objects associated with said related images.

1 14. An interface device for connecting to and
2 retrieving data from a remote computer system, said
3 interface device comprising:
4 means for setting data transfer constraints;
5 means for requesting data from a remote
6 computer system;
7 means for storing a plurality of generic
8 objects, each stored generic object corresponding to
9 an original object in data requested from said
10 remote computer system;
11 means for substituting each stored said generic
12 objects for said corresponding object; and
13 means for outputting said requested data, said
14 output data selectively including said generic
15 objects or corresponding original objects responsive
16 to said data transfer constraints.

1 15. The interface device as in claim 14, wherein
2 the outputting means is a video display.

1 16. The interface device as in claim 14, wherein
2 the interface device is a speaker.

1 17. A method of compressing digital images,
2 comprising the steps of:

- 3 a) identifying objects in a digital image;
4 b) identifying names of identified objects;
5 c) identifying a position of identified
6 objects;
7 d) identifying a position relative to one of
8 said identified objects in the digital image;
9 e) identifying characteristics of the
10 identified objects;
11 f) replacing identified objects with generic
12 objects, position data and characteristics; and,
13 g) sending the modified digital image to a
14 client system for display.

1 18. A method of restoring a compressed image
2 comprising the steps of: a) identifying
3 generic objects in received image data;
4 b) identifying corresponding objects in
5 subsequently received data;
6 c) replacing said identified generic objects
7 with said corresponding objects; and
8 d) displaying said image.

1 19. A computer program product for transferring
2 data across a computer network, said computer

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3 network including a plurality of computers, a
4 database stored on one of said plurality of
5 computers, said computer readable program code
6 comprising:
7 computer readable program code means for
8 setting data transfer constraints;
9 computer readable program code means for
10 requesting transfer of data stored on a remote
11 computer system;
12 computer readable program code means for
13 identifying at least one object included in said
14 requested data as being associated with a generic
15 object; and
16 computer readable program code means for
17 substituting the generic object for each of said at
18 least one object responsive to said data transfer
19 constraints.

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1 20. A computer program product as in claim 19,
2 wherein image data is requested by a user for
3 display on a web browser, said generic object being
4 substituted in a web browser image, said computer
5 program product further comprising:

6 computer readable program code including a
7 database with a plurality of generic objects.

1 21. A computer program product as in claim 20,
2 further comprising:

3 computer readable program code for transferring
4 additional generic objects associated with related
5 images while the web browser image is being
6 displayed.

1 22. A computer program product as in claim 21,
2 further comprising:
3 computer readable program code for substituting
4 said additional objects for said related object when
5 a related image is displayed.

1 23. A computer program product as in claim 20,
2 further comprising:
3 computer readable program code for transferring
4 requested object while a corresponding generic
5 object is being displayed and when said requested
6 object is received. replacing and displaying each
7 corresponding generic object with each said
8 requested object.